

receiving portion, forming on said inter-layer dielectric a light transmitting film having in its surface a concave portion conforming to said depression, forming at [the] a position that covers said concave portion on said light transmitting film a mask layer with a convexly curved surface without etching or planarizing the light transmitting film, and etching said mask layer and said light transmitting film all together, thereby making said light transmitting film into a [shape of said convex] lens.

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2. (Currently Amended) A process for producing a solid-state imaging device as defined in Claim 1, which further comprises, following the step of forming said light-receiving portion, the steps of forming electrodes to transfer charges generated by said light-receiving portion, said electrodes being positioned above both sides of said light-receiving portion and being insulated from said substrate, forming a shielding film which covers the [step of said] charge transfer electrodes [and opens] with an opening above said light-receiving portion, said shielding film being insulated from said charge transfer electrodes, and forming said inter-layer dielectric covering said shielding film and its opening in such a way that said depression is formed in the surface of said inter-layer dielectric [in conformity with the step of said charge transfer electrode and the step of said shielding film].

3. (Currently Amended) A process for producing a solid-state imaging device as defined in Claim 1, which further comprises, following the step of forming said light-receiving portion, the step of softening said inter-layer dielectric by heat treatment, thereby adjusting [the] a depth of said depression.

4. (Currently Amended) A process for producing a solid-state imaging device as defined in Claim 1, which further comprises the steps of forming a resist pattern as said mask layer on